

The transfected cells are preferably mammal cells and in particular mammal tumor cells.

According to one of its aspects, the present invention relates to a process for preparing cells transfected with a DNA coding for at least one MHC class II ligand, such as CD4 or LAG-3 or derivatives thereof comprising the steps consisting of removing cells from a patient, transfecting said cells with a DNA coding for at least one MHC class II-like ligand, such as CD4 or LAG-3 or derivatives thereof and recovering the so-transfected cells.

For the preparation of tumor cells according to the invention, this process will be reproduced on tumor cells removed from a patient.

However, according to a preferred embodiment, the MHC class II binding protein, namely CD4 or LAG-3 or the derivative thereof, is administered in a free form, namely in a soluble form by inoculating them systemically, for example as an s.c. i.m or i.v injection.

The medicament according to the invention may be used as a vaccine to prevent disorders associated with an antigen specific immune response, preferably a T-cell mediated immune response.

To that end, it is administered in a suitable vehicle together with one or several antigen(s) against which an immune response is sought. The antigen may be an inactivated or attenuated infectious agent or a purified antigen, eventually obtained by protein recombinant procedures, such as an antigen of an infectious agent or a tumor antigen, which preferably are able to elicit a T-cell mediated immune response.

The vaccine may be used to prevent a subject against an infectious disease, such as a viral, bacterial or parasitic disease wherein the infectious agent elicits an antigen specific immune response, preferably a T-cell mediated immune response.

The vaccine may also be used for treating patient against an infectious disease such as mentioned hereabove, involving a T-cell mediated immune response, namely a CD8⁺ T-cell mediated immune response.

Examples of diseases requiring a boost of an existing T-cell mediated immunity are provided in the following table.